

8th Grade Curriculum Requirements

<u>Requirement</u>	<u>Description</u>	<u>What SEPMN Can Do</u>
I.A.1.b.2.	Use scientific (field guides, charts, periodic tables, etc.) and identification keys for classification.	The SEPMN has an identification key to help students in classification of the species they find.
I.A.2.c.	Obtain scientific information from a variety of sources (such as Internet, electronic encyclopedias, journals, community resources, etc).	The SEPMN web site has a resources section to help teachers and students find out more about phytoplankton and harmful algal blooms. This would be a great resource to help link students to more scientific information on the web.
I.A.8.	Use mathematics in all aspects of scientific inquiry.	Students will be able to estimate the size of algae by using a compound microscope. Students will also be able to explain how measurements in metric units are used in reporting about algae and their blooms. Finally, students will be able to use the metric system and the appropriate equipment to make measurements of length. There are several mathematics exercises in the textbook <i>Algae: A Sourcebook for Teaching about Harmful Algal Blooms</i> .
I.B.4.	Technology used to gather data enhances accuracy and allows scientists to analyze and quantify results. a. Compare and contrast the quality of data collected with and without technological devices.	Students will learn about a geographic information systems (GIS) database through GIS products that will be displayed on the SEPMN web site. All information that volunteer monitoring groups submit will be put into the GIS database.
II.A.1.	Millions of species of animals, plants, and microorganisms are alive today. Although different species might look dissimilar, the unity among organisms becomes apparent from an analysis of internal structures, the similarity of their chemical processes and the evidence of common ancestry.	Students can look at different species of phytoplankton for comparison among other organisms
II.A.2.	Biological change accounts for the diversity of species developed through gradual processes over many generations. Biological adaptations, which involve the selection of naturally occurring variations in populations, enhance survival and reproductive success in a particular environment. How a species moves,	Students are able to look at specific characteristics that make certain types of phytoplankton stand out from others, such as flagella for movement.

	obtains food, reproduces, and responds to danger are based in the species' evolutionary history.	
--	--	--